

THE DIFFERENCES IN URODYNAMIC CHARACTERISTICS BETWEEN FEMALE PATIENTS WITH INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME AND OVERACTIVE BLADDER

Hypothesis / aims of study

Interstitial cystitis/bladder pain syndrome (IC/BPS) and overactive bladder (OAB) share some similar symptoms (urgency, frequency and nocturia). Therefore, it has been argued that both conditions might have a similar underlying pathophysiology. In this study we try to examine this argument by comparing the urodynamic findings between IC/BPS and OAB in female patients.

Study design, materials and methods

The urodynamic results were analyzed in 66 consecutive female patients with IC/BPS and 105 female patients with OAB between January 2009 and August 2010. The diagnosis of IC/BPS was based on National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases (NIDDK) criteria. To clearly separate two groups of patients, only OAB wet patients were enrolled. All OAB patients had urgency and urgency incontinence. Besides, No OAB patients had bladder-related pain and no IC/BPS patients had urgency incontinence. Symptoms assessment and questionnaires, including International prostate symptom score (IPSS), quality of life (QOL) score and overactive bladder symptom score (OABSS), were performed before urodynamic studies. All patients had been diagnosed and grouped into IC/BPS or OAB based on the clinical features before cystoscopy, potassium chloride sensitivity test and urodynamic investigation (video-urodynamic or conventional pressure-flow study).

Results

Mean (\pm SD) age of patients with IC/BPS and OAB was 47.2 (\pm 13.8) and 64 (\pm 13.7) years, respectively. Total score of IPSS and OABSS differed significantly between two groups ($p < 0.001$). Voiding sub-score of IPSS was significantly higher ($p < 0.001$) in patients with IC/BPS. Maximum flow rate based on non-catherized uroflowmetry was significantly lower ($p=0.024$) in patients with IC/BPS, as was mean flow rate ($p=0.004$). OAB patients had a smaller cystometric capacity than IC/BPS (mean 223.2 vs 185.5 ml, $P=0.004$). There was no significant difference in detrusor pressure at maximum flow between two groups. In patients received videourodynamic studies the diagnosis of dysfunctional voiding was more prevalent in patients with IC/BPS (63.6% v.s. 8.7%) but the prevalence of bladder neck obstruction was comparable (3% v.s. 4.3%).

Interpretation of results

This study showed that the urodynamic characteristics were significantly different between patients with IC/BPS and OAB. Patients with IC/BPS have more significant voiding symptoms with a higher prevalence of dysfunctional voiding.

Concluding message

Urodynamic characteristics were significantly different between patients with IC/BPS and OAB. IC/BPS patients usually are younger with more severe voiding symptoms, slower flow rate and a higher prevalence rate of dysfunctional voiding. The findings of this study suggest that the underlying pathophysiology might be different between IC/BPS and OAB.

<i>Specify source of funding or grant</i>	NO
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Taipei Veterans General Hospital
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes